



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

DATE:

JUL 5 2016

SUBJECT:

CLEAN AIR ACT INSPECTION REPORT
Tradebe Treatment and Recycling LLC, East Chicago, Indiana

FROM:

Kenneth Ruffatto, Environmental Engineer
AECAB (IL/IN)

THRU:

Nathan Frank, Section Chief
AECAB (IL/IN)

TO:

File

BASIC INFORMATION

Facility Name: Tradebe Treatment and Recycling LLC

Facility Location: 4343 Kennedy Avenue, East Chicago, Indiana

Date of Inspection: May 9, 2016

Lead Inspector: Kenneth Ruffatto, Environmental Engineer

Other Attendees:

1. Ethan Chatfield, Environmental Engineer
2. Natalie Topinka, Environmental Engineer/Scientist
3. Kevin Sokolow, IDEM
4. Tim Denhof, Tradebe
5. Tony Jones, Tradebe
6. John Parase, Tradebe
7. Tita LaGrimas, Tradebe
8. Brian Bodner, Tradebe

Purpose of Inspection: CAA Inspection,

Facility Type: Stationary Waste Management, Recycling, and Fuel Processing

Regulations Central to Inspection: 40 CFR Part 61, Subparts V and J; Part 63 Subpart DD and EEEE

Arrival Time: 8:50 AM

Departure Time: 11:50 AM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from Tradebe (Tim Denhof, Tony Jones, John Parase, or Tita LaGrimas) unless otherwise noted.

Process Description:

The facility is made up of multiple processes that are used to either store and transport product and waste or further process incoming waste to produce a cleaner product. EPA focused on the Solid Distillation System (SDS) processes. These processes take barrels of waste, shred them, and send the resulting waste through a rotating cylinder that is heated called the Anaerobic Thermal Desorption Unit (ATDU). The waste is heated up to a point where volatile components are pulled off for further processing and char and metal components are sent through a Solids Handling System (SHS) serviced by a baghouse that separates char and metal. The resulting vapor is sent through a Vapor Recovery Unit (VRU) where solvent can be recovered and sold. The facility also has a distillation system that can separate liquid wastes out for purity purposes. There are multiple areas in the facility devoted to storage and storage tanks are located throughout to hold everything from solvent products to fuel waste.

Staff Interview: During EPA's inspection, the distillation and pot still processes were not operating, but the thin film evaporator and SDS I and II were operating. The last tune-up on the SDS system was done in 2014. SDS II was started in May 2015. The SDS units operate for a couple of weeks but are then taken down because of particulate build-up. It takes 24 hours to cool down the system to a suitable level for operators to physically scrape off the particulates that are built up inside the equipment. The system is typically down for 2-3 days before started back up. A flare performance test was just done for the John Zink flare servicing both SDS I and II. The performance test is done every 5 years and the most recent one was completed on January 28, 2016. Mr. Jones said that when the SDS units were run at high rates (SDS I: 3 tons/hr; SDS II: >5 tons/hr) for the test, visible emissions came off of the flare. However, Mr. Jones went on to state that each SDS unit is typically only run at 2 tons/hr of waste. The flare is shut down every 2-3 weeks for maintenance on the burner tips, clean-out on flame arrestors, and coalescing filters. The flow rate to the flare is continuously monitored and averages about 400 ± 100 cfm. The temperature of the flare is monitored by a thermocouple. There are also back-up 1800 lb carbon adsorption units for each SDS. All of the tanks on site are assumed to have a maximum HAP vapor pressure of 11 psia because of the variability in materials that are stored, but having carbon adsorption units on each one allows some flexibility. All carbon adsorption units are inspected daily for breakthrough; typically a PID is used at the exit of the unit and 100 ppm

signifies breakthrough. LDAR is done on a quarterly basis because the facility consistently had shown <2% leaks. As a precaution, repairs are done on any components with leaks greater than 250 ppm. The facility staff perform LDAR using a PID from Rae Systems.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:

EPA toured the facility to observe potential sources of VOC and PM emissions. A FLIR camera was used in order to find areas with fugitive VOC emissions. EPA observed gas coming out of the top of the hydropulper. EPA also smelled paint throughout the tour and observed at least two containers that were not sealed, one that contained a product. EPA also observed a PM leak in SDS II and fugitive PM emissions escaping from the metal collector.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

No additional records reviewed on-site.

CLOSING CONFERENCE

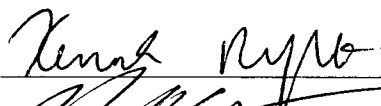
Requested documents:

- 12-Month rolling VOC calculations
- Performance test for flare
- Emission factors for fugitive VOC emissions
- Spreadsheet back to 2011 identical to that provided in Item 2b of 114 Request
- LDAR logs for past two quarters

Concerns: EPA pointed out the need for more stringent operating procedures in sealing potential emission sources. EPA also expressed concern in the PM emissions that occurred near the shaker in SDS II.

SIGNATURES

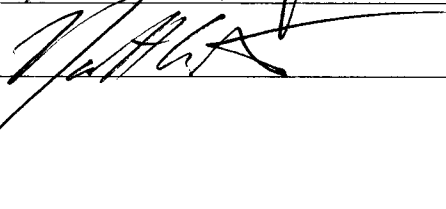
Lead Inspector:



Date:

6/8/2016

Section Chief:



Date:

7/5/16

Facility Name: Tradebe Treatment and Recycling LLC
Facility Location: 4343 Kennedy Avenue, East Chicago, Indiana
Date of Inspection: May 9, 2016

APPENDICES AND ATTACHMENTS

- Appendix A: Medio (Photos)
- Appendix B: Media (Videos)

All Appendices contain CBI.

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